What is claimed is:

1. A display device that displays an image by dividing a single field display cycle into cycles of a plurality of subfields each having an address cycle and a sustain cycle, in accordance with pixel data for each pixel on the basis of an input picture signal,

comprising:

a display panel having a front face substrate and a rear face substrate disposed facing each other with a discharge space interposed therebetween, a plurality of row electrode pairs provided on the inner face of the front face substrate, and a plurality of column electrodes arranged so as to intersect the row electrode pairs on the inner face of the rear substrate, a unit light emission region, which consists of a first discharge cell, and a second discharge cell in which a light absorption layer is provided on the front face substrate side and a secondary electron discharge material layer is provided on the rear face substrate side, being formed at each intersection between the row electrode pairs and the column electrodes;

an address part that sequentially applies a positive scan pulse to a first row electrode of each of the row electrode pairs in the address cycle while sequentially applying a pixel data pulse corresponding to the pixel data at the same timing as the scan pulse to each of the column electrodes one display line at a time so that the column

electrode side constitutes a cathode, such that an address discharge is selectively produced in the second discharge cell; and

a sustain part that applies a sustain pulse to each of the row electrodes constituting the row electrode pairs in the sustain cycle,

wherein the sustain part applies the ultimate sustain pulse of the sustain pulses applied in the sustain cycle to the first row electrode with a negative polarity.

2. The display device according to claim 1, wherein the sustain part applies all the sustain pulses applied in the sustain cycle to the row electrode pairs with a negative polarity.

3. The display device according to claim 1, wherein the address part sets the first discharge cell to either one of a lit cell state or an unlit cell state by extending a selective address discharge in the second discharge cell to the first discharge cell.

4. The display device according to claim 1, wherein the first discharge cell comprises a part in which the first and second row electrodes constituting the row electrode pair face one another via a first discharge gap within a discharge space, and the second discharge cell comprises a part in which the column electrodes, and the first row electrode of the row electrode pair face one another via a second discharge gap within a discharge space.

5. The display device according to claim 1, wherein:

the first and second row electrodes constituting the row electrode pair each comprise a main body portion that extends in the row direction, and a protrusion that protrudes from the main body portion in the column direction so as to face each other in each of the unit light emission regions via a first discharge gap;

the first discharge cell comprises a part in which the protrusion protrudes via the first discharge gap in the discharge space; and

the second discharge cell comprises a part in which the main body portion of the first row electrode of the row electrode pair, and the column electrodes face one another via a second discharge gap within a discharge space.

6. The display device according to claim 1, wherein the discharge space of the second discharge cell of each unit light emission region is closed by adjoining unit light emission region discharge spaces and barrier walls, and the discharge spaces of the first discharge cells of the respective unit light emission regions adjoining in a row direction are linked.

7. The display device according to claim 1, wherein a phosphor layer, which emits light through discharge, is formed in only the first discharge cell.

8. The display device according to claim 1, further comprising:

reset means for producing a reset discharge between the first row electrode and the column electrodes in the second discharge cell by applying a reset pulse to the first row electrode, prior to the address discharge implemented by the address part.

9. The display device according to claim 1, wherein the reset pulse has a waveform whose level transition in the rising section of the waveform or the falling section thereof is gradual in comparison with that of the sustain pulse.

10. The display device according to claim 8, wherein the reset pulse has a waveform whose level transition in the rising section of the waveform or the falling section thereof is gradual in comparison with that of the sustain pulse.

11. A drive method that drives a display panel in accordance with pixel data for each pixel on the basis of an input image signal, the display panel having a front face substrate and a rear face substrate disposed facing each other with a discharge space interposed therebetween, a plurality of row electrode pairs provided on the inner face of the front face substrate, and a plurality of column electrodes arranged so as to intersect the row electrode pairs on the inner face of the rear substrate, a unit light emission region, which consists of a first discharge cell, and a second discharge cell in which a light absorption

layer is provided on the front face substrate side and a secondary electron discharge material layer is provided on the rear face substrate side, being formed at each intersection between the row electrode pairs and the column electrodes,

wherein:

a single field display cycle is constituted by cycles of a plurality of subfields each having an address cycle and a sustain cycle;

a positive scan pulse is sequentially applied to a first row electrode of each of the row electrode pairs in the address cycle while a pixel data pulse corresponding to the pixel data is sequentially applied at the same timing as the scan pulse to each of the column electrodes one display line at a time so that the column electrode side constitutes a cathode, such that an address discharge is selectively produced in the second discharge cell;

a sustain pulse is applied to each of the row electrodes constituting the row electrode pairs in the sustain cycle; and

the ultimate sustain pulse of the sustain pulses applied in the sustain cycle is applied to the first row electrode with a negative polarity.